Figure 1

(a) carbohydrate phosphotransferase; (b) KDPGal aldolase, D-erythrose 4-phosphate; (c) DAHP synthase, D-erythrose 4-phosphate; (d) shikimate pathway enzymes

Figure 2

Figure 3

	Plasmid Map ^a			
Plasmid (size)			×	
pNR5.223	<u>X</u>			<u> </u>
(4.5-kb)	kan ^R Ap ^R		Plac EC	C dgoA
pNR7.088	٣		B	
(4.8-kb)	Ap ^R la	cl ^Q	Ptrc E	Aoob C
(8	P
pNR7.118				<u></u>
(5.9-kb)	Ap ^R la	ıcl ^Q	Ptac E	C dgoA
pNR6.252	Ę		Ę.	E
(5.9-kb)	Ap ^R la	aclQ	P _{tac} K	P dgoA
	₽		Ę	B
pNR7.126			<u> </u>	EPP -
(6.4-kb)	Ap ^R lacl ^Q	Ptac	aroF	
pNR7.288	N N E (Bg) (Bg) E	K		(\$) N
(8.5-kb)	Ap ^R P _{lac} (aroF) cat (aroF) a	aroE	serA	
		(M)	(1)	4) B
pNR7.297	B B	<u> </u>		
(5.2-kb)	Cm ^R P _{lac} (aroG	à)	tet	(aroG)
pNR7.290	ү Х	P	P	<u>H</u>
(6.8-kb)	Ap ^R laci ^Q P _{trc} (are	~	Kan ^R	(aroH)
, ,		O,		(0.01)
pKP03-3	Ē			
(5.9-kb)	ApR	laci ^Q	Ptac	KP03-3
pEC03-1	P		В	Р
(4.8-kb)	ApR	lacio	P	EC03-1
,	•	Ę	Ę	 (뉴)
pNR8.074	(H)		> -	<u>`</u> "
(7.5-kb)	Ap ^R lacl ^O P _{ta}	⊯ KP dg	ροĀ	serA
pKP03-3serA	(Ḥi)	Ę	병	(H)
(7.5-kb)		RE KP03	3	serA
, ,		B B	P	
pNR8.075	(H)			(H)
(6.8-kb)	Ap ^R lacl ^Q P _{tr}	re EC d	goA	serA
-F000 4 - *	(Ĥ)	Ŗ	P	(Ḥ)
pEC03-1serA (6.8-kb)		_	> -	
(0.0 1.0)	Ap ^R laci ^Q P _{ti}	rc EC03	⊢ 1	serA

4/5

Figure 4

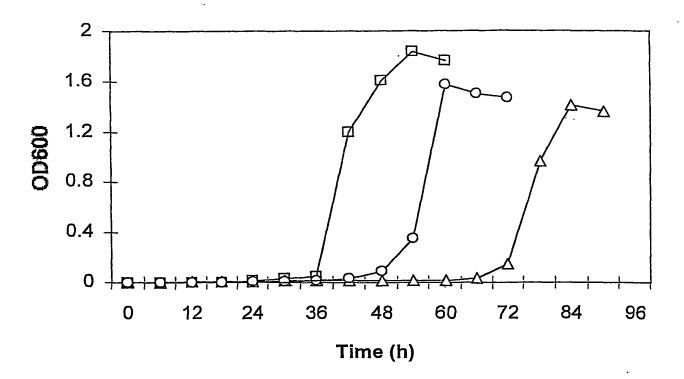


Figure 5

